

REMARKS

The following remarks are prepared in response to the Office Action mailed April 16, 2004. Claims 21-43 are to be pending in this application, after entry of this amendment. Claims 38-43 stand allowed. Applicant appreciates the indication from the Examiner that claims 26-28, 36 and 37 contain allowable subject matter.

Claims 23 and 28 were objected to because of some minor informalities. Claims 21-25 and 30-35 were rejected under 35 U.S.C. §102(b) as being anticipated by *Ishinaga et al.* (U.S. Patent No. 5,175,565, hereinafter *Ishinaga*). Claim 29 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Ishinaga*. Applicant respectfully traverses and requests reexamination.

Independent Claim 21

The rejection of claim 21 should be withdrawn as *Ishinaga* fails to disclose, teach or suggest all the recitations of claim 21 and therefore does not anticipate claim 21.

Focusing now on the specific recitations of claim 21 and the inadequacies of *Ishinaga*, claim 21 recites, amongst other things, “N region temperature sensors that each sense a temperature of one of the N regions.”

Ishinaga discloses a temperature sensor 2 on the substrate 1 (*Ishinaga*, figures 9A, 9B and 33 and column 26, lines 45-46). The sensor 2 shown has a meander structure to provide a high resistance as a whole without adverse influence to the wiring on the substrate (*Ishinaga*, figures 9A and 9B and column 6, lines 43-45). The output of the temperature sensor 2 is amplified by an operational amplifier 33 and is supplied to an A/D converter 34 where a digitalized temperature level is inputted into the CPU 11 (*Ishinaga*, column 8, lines 18-22). The CPU calculates a difference between the temperature T_n read at this time (Step S1) and the temperature T_{n-1} read at the previous time.

As can be seen, *Ishinaga* does not disclose, teach or suggest a printing system comprising N region temperature sensors that each sense a temperature of one of the N regions. That is, *Ishinaga* does not disclose, teach or suggest multiple temperature sensors such that each senses a temperature of one of the N regions. The Examiner directs Applicant to figures 9A and 9B, however, these figures only show a temperature sensor 2 for generally measuring the temperature of the substrate. The temperature sensor 2 does not measure the temperature of one of the N

regions, which includes an ink ejection element. Nowhere does *Ishinaga* discuss that the temperature sensor 2 senses a temperature of one of the N regions where an ink ejection element is located. As such, the rejection of claim 21 should be withdrawn.

Dependent Claims 22-30

Claims 23 and 28 have been amended to correct the minor informalities. Claims 22-30 are also not anticipated by or rendered obvious in view of *Ishinaga* at least because of their dependence on claim 21. In addition, claims 22-30 define the printing system with greater particularity and thus further distinguish over *Ishinaga* and the other references of record. For these reasons, as well as others, claims 22-30 should be allowable.

Independent Claim 31

Claim 31 recites, amongst other things, “means for sensing a temperature of each of the N regions.” As discussed above, *Ishinaga* fails to disclose multiple temperature sensors such that each senses a temperature of one of the N regions. For at least this reason, claim 31 is allowable over *Ishinaga*.

Dependent Claims 32-37

Claims 32-37 are also not anticipated by or rendered obvious in view of *Ishinaga* at least because of their dependence on claim 31. In addition, claims 32-37 define the printing system with greater particularity and thus further distinguish over *Ishinaga* and the other references of record. For these reasons, as well as others, claims 32-37 should be allowable.

Claims 38-43

Applicant appreciates the indication from the Examiner that claims 38-43 are allowed.

Conclusion

In view of the amendments and remarks, it is respectfully submitted that all the pending claims are in condition for allowance, and such action is earnestly solicited.

If the Examiner believes an interview would be helpful to advance this case, he is invited to contact the undersigned attorney.

Respectfully submitted,

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